

Kathleen Sebelius, Governor Roderick L. Bremby, Secretary

DEPARTMENT OF HEALTH AND ENVIRONMENT

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Division of Environment

October 8, 2008

Jerome E. Cibrik, P.G.
Union Carbide Corporation - Remediation Technology Section
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South Charleston, WV 25303

RCAP-RECEIVED

OCT 09 2008



RE: First Quarter 2008 Status Report, Unison Transformer Services, Inc. Site, Fairfax District, Kansas City, Kansas, Consent Order # 97-E-0036

Dear Mr. Cibrik:

The Kansas Department of Health and Environment (KDHE) has completed review of the above referenced document submitted by Union Carbide Corporation (UCC) for the Unison Transformer Services Site and has the following technical review comments. KDHE received on July 17, 2008 the referenced report, which was prepared on behalf of UCC by CH2M Hill, Inc.

KDHE notes a recurring concern; analytical detection limits for certain compounds exceeds the Risked-Based Standards for Kansas RSK Manual – 4th Version, June 2007 (RSK) screening values (for example vinyl chloride in ground water monitoring well MW-89d.) Please insure that future data have analytical reporting levels that are protective of human health and the environment.

While KDHE recognizes that "significant reductions" in contaminant concentrations have occurred on site resulting from the application of active remediation technologies, on the order or percentages, please be aware that KDHE will not approve any final remedy allowing for unrestricted future use if the analytical detection limits exceed the RSK. The RSK is the enforcement standard that meets the criteria of protecting human health and the environment by returning a potable aquifer to its most beneficial use. KDHE expects UCC to protect ground water resources to the maximum [practical] extent while meeting National Contingency Plan remedial alternative screening criteria.

UCC states on page 2-1, in section 2.2, paragraph 2, "Airflow to these three AS [ED. air sparge] wells was shut down in early April 2008 and an assessment and corrective action is underway." Please provide KDHE with details of the evaluation results and the anticipated corrective measures so that KDHE can review and comment on these proposed corrective measures.

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It appears that Unison is attempting to implicitly make the case that ground water remediation is nearly, if not at the practical limit of [design] performance based on effluent (vapor) monitoring. KDHE will not accept the conclusion as to whether or not remediation has achieved design goals based solely on vapor monitoring, While KDHE recognizes that effluent concentrations have been reduced, actual ground water concentrations – the enforceable criteria – still exceed the Risk-Based Standards for Kansas, RSK Manual, 4<sup>th</sup> Version (June 2007) screening levels. The actual ground water concentrations dictate the effectiveness of ground water remediation.

Please discuss the ground water data, not only oriented horizontally but also discuss the vertical distribution of the ground water contamination. This is especially important since UCC is attempting to make the case (in other project documentation) that there are other source areas contributing to identified ground water contamination.

The report author identified in the text (section 4.4) which ground water monitoring points were utilized in constructing figures 4-4 and 4-5. However, these points are not identified on the figures themselves. Please include on the transient plots the ground water monitoring points used to construct the plots.

Concluding, KDHE concurs that including ground water contamination cross section in subsequent status reports is appropriate. Also, KDHE has prepared a response to the UCC request to shut down the on site soil vapor extraction portion of the interim site remedy under separate cover. If you have comments or questions, I can be reached at johncook@kdhe.state.ks.us or (785) 296-8986.

Sincerela

John K. Cook, L.P.G.

Professional Geologist

Restoration and Long-Term Stewardship Unit/Remedial Section

Bureau of Environmental Remediation

JKC/mm

C: D. Ross -> File: C4-105 70168 1.0

Michael B. Davis, EPA Region 7, RCAP Don Blackert, Key Environmental, Inc.

Paul Rohde, CH2M-Hill